This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 – 162. (Canceled)

163. (Currently amended) A transdermal hormone delivery system comprising a backing layer and an adhesive polymer matrix ~~containing progestin and estrogen hormones to be transdermally delivered~~ affixed to the backing layer, wherein the adhesive polymer matrix comprises:

(a) an adhesive polymer;

(b) a humectant;

(c) a combination of skin permeation enhancing agents consisting essentially of, on a final percentage by weight of the adhesive polymer matrix after fabrication of the system, from about 4% to about 12% dimethyl sulfoxide; from about 4.2% to about 12.6% a fatty (C_8-C_{20}) alcohol ester of lactic acid; from about 0.7% to about 2.3% lower (C_1-C_4) alkyl ester of lactic acid; and from about 3% to about 9% capric acid;

(d) a progestin; and

(e) an estrogen

~~an adhesive polymer, a humectant, the progestin, the estrogen, and a combination of skin permeation enhancing agents comprising dimethyl sulfoxide, a fatty (C_8-C_{20}) alcohol ester of lactic acid, a lower (C_1-C_4) alkyl ester of lactic acid, and capric acid, wherein the capric acid is present in an amount between about 3% and about 9% by weight of the adhesive polymer matrix~~.

164. (Previously presented) The transdermal delivery system of claim 163, wherein the adhesive polymer is a polyacrylate copolymer, a polyisobutylene or a silicone adhesive.

165. (Previously presented) The transdermal delivery system of claim 164, wherein the polyacrylate copolymer comprises a 2-ethylhexyl acrylate monomer.

166. (Previously presented) The transdermal delivery system of claim 165, wherein the polyacrylate copolymer further comprises about 3 to 60% w/w vinyl acetate.

167. (Previously presented) The transdermal delivery system of claim 163, wherein the humectant comprises polyvinylpyrrolidone.

168. (Previously presented) The transdermal delivery system of claim 167, wherein the humectant comprises a polyvinylpyrrolidone copolymer.

169. (Previously presented) The transdermal delivery system of claim 168, wherein the humectant is a polyvinylpyrrolidone/vinyl acetate copolymer.

170. (Previously presented) The transdermal delivery system of claim 169, wherein the polyvinylpyrrolidone is formulated in an amount of about 60% w/w and the vinyl acetate is formulated in an amount of about 40% w/w in the polyvinylpyrrolidone/vinyl acetate copolymer.

171. (Previously presented) The transdermal delivery system of claim 163, wherein the fatty alcohol ester of lactic acid is lauryl lactate.

172. (Previously presented) The transdermal delivery system of claim 163, wherein the lower alkyl ester of lactic acid is ethyl lactate.

173. (Previously presented) The transdermal delivery system of claim 163, wherein the progestin is levonorgestrel.

174. (Previously presented) The transdermal delivery system of claim 163, wherein the estrogen is ethinyl estradiol or 17 β-estradiol.

175. (Previously presented) The transdermal delivery system of claim 173, which, when applied to the skin of a human, once each week, consecutively over a period of three or more weeks, deliver *in vivo* an average serum concentration of over 1000 pg/ml of levonorgestrel.

176. (Currently amended) The transdermal delivery system of claim 163, wherein the adhesive polymer matrix comprises about 12% to about 36% ~~more than 10% and less than about 30%~~ by weight of the combination of skin permeation enhancing agents.

177. (Previously presented) The transdermal delivery system of claim 163, wherein the adhesive polymer matrix comprises about 18% to about 30% by weight of the combination of skin permeation enhancing agents.

178. (Previously presented) The transdermal delivery system of claim 163, wherein the adhesive polymer matrix comprises about 21% to about 27% by weight of the combination of skin permeation enhancing agents.

179. (Previously presented) The transdermal delivery system of claim 163, wherein the adhesive polymer matrix is formulated by combining the adhesive polymer, the humectant, the progestin, the estrogen, and about 10% to about 30% by weight of the combination of skin permeation enhancing agents.

180. (Previously presented) The transdermal delivery system of claim 163, wherein the adhesive polymer matrix is formulated by combining the adhesive polymer, the

humectant. the progestin, the estrogen, and about 13% to about 27% by weight of the combination of skin permeation enhancing agents.

181. (Previously presented) The transdermal delivery system of claim 163, wherein the capric acid is present in an amount between about 4% and about 8% by weight of the adhesive polymer matrix.

182. (Previously presented) The transdermal delivery system of claim 163, wherein the capric acid is present in an amount between about 5% and about 7% by weight of the adhesive polymer matrix.

183. (New) The transdermal delivery system of claim 163, wherein the dimethyl sulfoxide is present in an amount between about 5% and about 11% by weight of the adhesive polymer matrix.

184. (New) The transdermal delivery system of claim 163, wherein the dimethyl sulfoxide is present in an amount between about 6% and about 10% by weight of the adhesive polymer matrix.

185. (New) The transdermal delivery system of claim 163, wherein the fatty (C_8-C_{20}) alcohol ester of lactic acid is present in an amount between about 5.2% and about 11.6% by weight of the adhesive polymer matrix.

186. (New) The transdermal delivery system of claim 163, wherein the fatty (C_8-C_{20}) alcohol ester of lactic acid is present in an amount between about 6.2% and about 10.6% by weight of the adhesive polymer matrix.

187. (New) The transdermal delivery system of claim 163, wherein the lower (C_1-C_4) alkyl ester of lactic acid is present in an amount between about 1.0% and about 2.0% by weight of the adhesive polymer matrix.

188. (New) The transdermal delivery system of claim 163, wherein the lower (C_1-C_4) alkyl ester of lactic acid is present in an amount between about 1.2% and about 1.8% by weight of the adhesive polymer matrix.